

REMARKS

Claims 1-20 are pending. Claims 17 and 18 have been amended for clarity only. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Entry of this Amendment is respectfully requested since no new issues are raised by the entry of this Amendment and it places the application in condition for allowance, or at least in better form for appeal.

Furthermore, Applicants respectfully submit that the finality of the October 12, 2005 Office Action is premature. Specifically, in response to the previous Office Action, Applicants did not amend the claims. The October 12, 2005 Office Action indices that those arguments are moot in view of the Examiner's newly presented rejection. Accordingly, since Applicants did not amend the claims and the Examiner has withdrawn the previous rejection in favor of the newly presented rejection, Applicants respectfully submit that the finality of the October 12, 2005 Office Action is improper and respectfully request withdrawal of the finality of the Office Action.

Claim Rejections Under 35 U.S.C. § 112

Claims 17 and 18 were rejected under 35 U.S.C. § 112, second paragraph. Applicants have amended claims 17 and 18 to correct the errors identified by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Double Patenting

Claim 1 was rejected under the judicially created doctrine of double patenting over claim 6 of U.S. Patent Application 10/334,634.

Applicants respectfully submit that the present application and U.S. Application No. 10/334,634 are commonly owned by Electronics and Telecommunications Research Institute. Accordingly, Applicants will submit a Terminal Disclaimer in compliance with 37 C.F.R. 1.321(c) once this application is in otherwise allowable condition.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 13-20 were rejected under 35 U.S.C. § 103(a) over Horng et al. (U.S. Patent No. 6,839,379) in view of Sawahashi et al. (U.S. Patent No. 5,694,388). Applicants respectfully traverse this rejection.

Claim 13 recites, in part, an adaptive RAKE receiving method that includes setting initial coefficients of adaptive filters for multi-path components and updating the coefficient of the adaptive filters based on a constraint MMSE criterion. As admitted in the Office Action, on page 4, Horng fails to teach or suggest, at least this feature of claim 13. The Office Action alleges that Sawahashi teaches this feature and further alleges that the combination would be obvious. Applicant respectfully disagree.

Sawahashi discloses tap vector calculations based on MMSE. Sawahashi does not teach or suggest that the MMSE has any constraints as recited in claim 13. Specifically, as disclosed in the specification on page 9, an exemplary constraint may be that the inner product of a filter coefficient and the corresponding multipath component are maintained at 1. Other constraints are also discussed in the specification. Sawahashi fails to discuss any such constraints. Accordingly, no combination of Horng and Sawahashi teach or suggest an adaptive RAKE receiving method that includes setting initial coefficients of adaptive filters for multi-path components and updating the coefficient of the adaptive filters based on a constraint MMSE criterion, as recited in claim 13.

Claim 20 is believed allowable for at least the reasons presented above with respect to claim 13 since claim 20 recites features similar to those discussed above with respect to claim 13.

Claims 14-19 are believed allowable for at least the same reasons presented above with respect to claim 13 by virtue of their dependence upon claim 13. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 2-12 contain allowable subject matter and would be allowable if rewritten in independent form. However, in view of the foregoing, Applicants respectfully submit that all of the claims (claims 1-20) are allowable.

Conclusion

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

MAYER BROWN ROWE & MAW LLP

By: 
Yoon S. Ham
Registration No. 45,307
Direct No. (202) 263-3280

Reg No. 51,673

YSH/VVK

Intellectual Property Group
1909 K Street, N.W.
Washington, D.C. 20006-1101
(202) 263-3000 Telephone
(202) 263-3300 Facsimile

Date: November 28, 2005